Patent Claims

1. An apparatus for the return of lubricant for a refrigeration machine (K) comprising a container (2) with at least one sheet metal partition (3), said sheet metal partition (3) dividing the container (2) into at least a first zone (4) and a second zone (5), as well as a sheet metal separating member (7) arranged in the second zone (5) for separating out lubricant (6), wherein in the second zone (5) an extraction device (8) is arranged in relation to the sheet metal separating member (7) in such a way and formed so that the lubricant (6) separated out at the sheet metal separating member (7) is removable from the container (2) by means of the extraction device (8).

2. An apparatus for the return of lubricant in accordance with claim 1, in which the extraction device (8) comprises an extraction stub (9) for receiving the lubricant (6).

3. An apparatus for the return of lubricant in accordance with claim 1 or claim 2, in which a sheet metal lubricant catcher (10) is arranged between the sheet metal separating member (7) and the extraction device (8).

4. An apparatus for the return of lubricant in accordance with one of the previous claims, wherein the extraction device (8) includes a collecting container (12) for the lubricant (6) connected with the extraction stub (9) via a line (11).

5. An apparatus for the return of lubricant in accordance with claim 4, wherein a valve (13) is provided in the line (11) for the control and/or regulation of the amount of lubricant (6) to be extracted from the container (2).

6. An apparatus for the return of lubricant in accordance with claim 4 or claim 5, wherein the collecting container (12) includes means (14, 15) and is formed in such a way that residues of a refrigerant (16) can be separated from the lubricant (6).

7. An apparatus for the return of lubricant in accordance with one of the previous claims, wherein, in the operating state, the lubricant (6) is an oil which is essentially non-soluble in the refrigerant (16).

8. An apparatus for the return of lubricant in accordance with one of the previous claims, wherein the refrigerant (16) is carbon dioxide.

9. A refrigeration machine (K) with a lubricant return in accordance with one of the claims 1 to 8.

10. A refrigeration machine (K) in accordance with claim 9 with a compressor (17) and a vaporiser (18), wherein the lubricant return is arranged between the compressor (17) and the vaporiser (18).